

| | inches. |
|--|------------------|
| Total length | 43 $\frac{1}{2}$ |
| Height under first dorsal | 7 |
| Head, width at spout-holes | 5 $\frac{3}{8}$ |
| Eye-slit, length | 2 $\frac{1}{4}$ |
| ———, distance from snout | 2 |
| Spout-holes, length | $\frac{1}{5}$ |
| Mouth, width = distance from snout | 3 $\frac{1}{2}$ |
| Pectorals, width of base | 2 |
| ———, distance from snout | 9 $\frac{1}{4}$ |
| First dorsal, length of base | 5 $\frac{3}{8}$ |
| ———, vertical height | 2 $\frac{1}{8}$ |
| Second dorsal, length of base | 3 $\frac{1}{2}$ |
| ———, vertical height | 2 $\frac{1}{4}$ |
| Ventrals, width of base | 1 $\frac{1}{2}$ |
| ———, distance from snout | 27 |
| Caudal, length | 9 $\frac{1}{2}$ |

7. Description of *Halcrosia afzelii**, a new Crocodile from Sierra Leone, West Africa. By WILHELM LILLJEBORG, Professor of Zoology in the University of Upsala, F.M.Z.S.

Length from the point of the nose to the tip of the tail about 4' (Swedish workmen's measure †, *i. e.* with 12 inches to the foot). Length of the head from the os quadratum 7 $\frac{1}{4}$ " ; breadth of the head at the back part 4 $\frac{1}{4}$ " ; its length from the posterior extremity of the under jaw 8", from the orbits to the point of the nose 3 $\frac{5}{8}$ " ; breadth of the nose over the ninth tooth, the widest part of the upper jaw, 2 $\frac{7}{16}$ ". Length of the tail 2'. The head's length in proportion to its breadth marks it as a short broad form ; the nose is, however, much narrower than in the *Halcrosia frontata* (Murray) ‡, as is evident by the proportion of the breadth above the ninth tooth to the distance between the orbit and the tip of the nose, the former being but about two-thirds of the latter. According to Murray's figure this breadth amounts to three-fourths of the above-mentioned distance. With respect to the form of the nose, it appears to be intermediate between *Halcrosia frontata* and *Crocodilus vulgaris*. The fossæ supratemporales are small, and their lower openings very small, situated in front, and directed outwards and forwards. The supratemporal or sincipital plane is somewhat concave in the middle, and the forehead between the orbits destitute of keel.

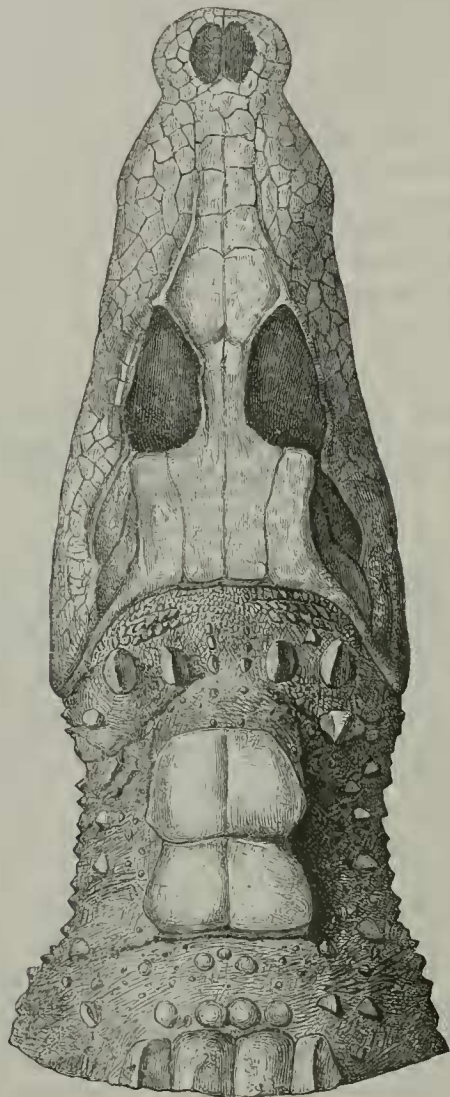
* With this name we call to remembrance the late Professor Adam Afzelius of Upsala, who brought home to Sweden from Sierra Leone this specimen, together with many other interesting specimens of animals and vegetables.

† Swedish feet and (workmen's) inches are reduced to English by multiplying by 0.9741, or dividing by 1.0266.

‡ Gray, P. Z. S. 1862, p. 213.

From the anterior angle of the orbits a tolerably highly raised ridge passes over each of the ossa lacrymalia, and extends somewhat more than a third of the nose's length; and these ridges converge as they approach the tip of the nose. The nasal bones extend so far into

Fig. 1.

Head of *Halcrosia afzelii*.

the cavity of the nostrils as almost entirely to constitute the division between them, and leave only a very small space occupied by cartilage between themselves and the back-turned processes of the intermaxillary bones. The head, when looked at in profile, exhibits almost the same strongly marked concavity over the nose as the

Halcrosia frontata. The edges of the jaws are strongly sinuated; and the upper jaw has on each side a deep hollow, to receive the seventh tooth of the lower jaw, which in this instance is the largest, and its two foremost front teeth do not pass through the intermaxillary bone. The teeth are $\frac{17-17}{15-15}$. The back teeth of the under jaw do not project in between those of the upper jaw, but within them, as in the case of the Alligators.

Fig. 2.

Hind foot of *Halcrosia afzelii*.

Our specimen being imperfect, we have, as regards the feet, the opportunity of examining only one of the hind feet (fig. 2). The web is well developed, but the exterior edge of the foot is not fringed. It has but one row of four somewhat large keeled scales, which do not form any prominent lobe or fringe. The remainder of the outer side of the foot is covered with keeled scales of various sizes.

With regard to the plates of the skin, this genus, as is known, is especially distinguished by the peculiar form of the upper plates of the nape. These have also in this species a characteristically broad form, with almost horizontally outstanding keels, and are particularly large; but there are but two pairs, and a considerable interval separates the posterior from the anterior dorsal plates; they have in the middle of their upper surface a shallow longitudinal groove. The cervical plates are six in number, forming a curved transversal row, and are oval and strongly keeled. The dorsal plates form four continuous longitudinal rows, of which the outermost on each side is distinctly, the inmost indistinctly, keeled; there is, moreover, on each side a couple of imperfect rows, and several scattered plates on the sides of the body. The back and loin have eighteen transversal rows of plates, including the foremost exceedingly small ones. The tail has twelve similar rows between the base and the strongly projecting serrated lobe, or crista. All these plates are as it were sculptured with fine concentric raised lines, as is also the case with the plates of the head and feet. As the end of the tail is missing I am unable to give the number of plates in its crista. The ventral plates are ossified. The colour is indistinct, but seems to have been a very dark brown.

The animal in its general habit closely resembles the Alligators, and was on this account, by the late Professor Thunberg, in the University's collection, named *Lacerta alligator*. The specimen, which is imperfect, was brought from Sierra Leone, West Africa, by the late Professor Adam Afzelius, and was, together with his other collections, presented many years ago to this University's Zoological Museum.

8. Remarks upon the Fabrician species of the Satyride Genus *Mycalesis*; with Descriptions, and Notes on the named varieties. By ARTHUR G. BUTLER, F.Z.S.

The scarcity of figures of the Fabrician insects, and the culpable carelessness noticeable in the descriptions of that author, more especially the bad habit which he had of describing the same species twice under separate names, has made the determination of his species, at all times, a work requiring much time, labour, and patience.

The existence of several types in the Banksian collection, of course, affords most important assistance to the student; but as the labels upon these types have in some cases been transposed, it is at all times necessary to compare the insects carefully with their descriptions.

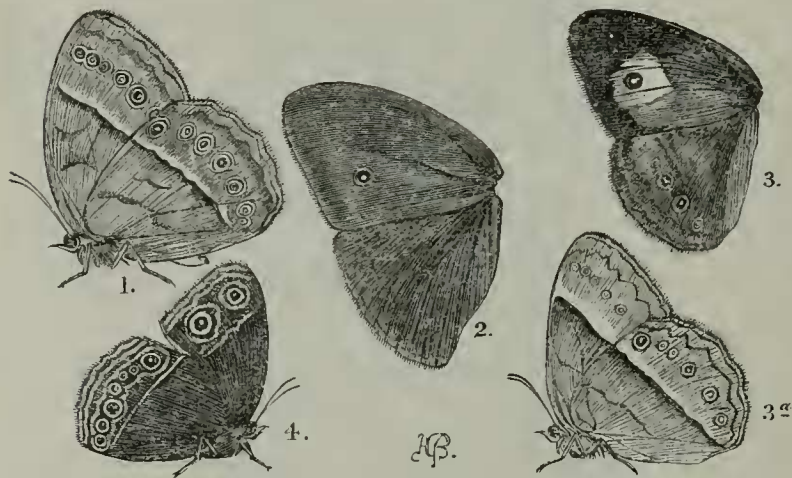


Fig. 1. *Mycalesis sirius*.
2. — *perseus*.

Figs. 3, 3a. *Mycalesis terminus*.
4. — *blasius*.

I have recently been working out the genus *Mycalesis*, and I find that little or no notice has been taken of the Fabrician specimens, the necessary consequence of which has been that several of his species have been referred to genera with which they have no connexion, whilst the insects themselves have been redescribed, and thus